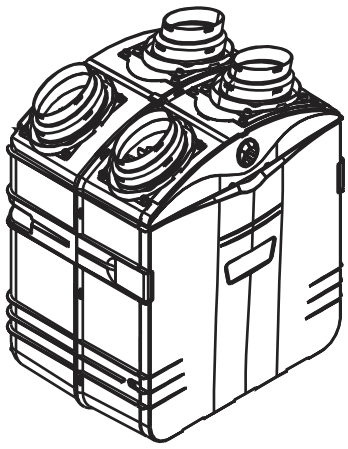
INSTALLATION INSTRUCTIONS AND USER MANUAL

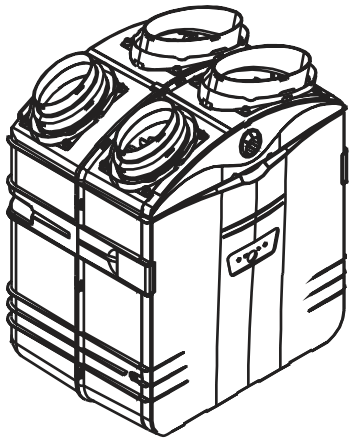
MODELS

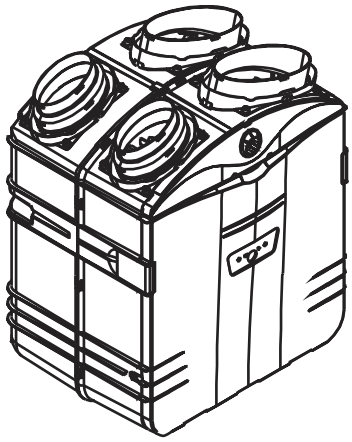
HRV 2600*
HR 2.6*

HEPA 3100*
HF 3.1*



HEPA 4100*





VB0064

NOTES: 1. HRV 2600* and HR 2.6* models are available in Canada only.
2. HEPA 4100* model is available in United States only.

*Patents pending

RESIDENTIAL USE ONLY

READ AND SAVE THESE INSTRUCTIONS

INSTALLER: LEAVE THIS MANUAL WITH THE HOMEOWNER.
HOMEOWNER: USE AND CARE INFORMATION ON PAGES 18 TO 21.

ABOUT THIS MANUAL

First, we want to congratulate you on your purchase of this excellent unit which will allow you and your family to enjoy clean and healthy air throughout your home for years to come!
Because of the large amount of models covered by this publication, the illustrations are typical ones. Some details of your unit may be slightly different than the ones shown.

Please take note that this manual uses the following symbols to emphasize particular information:

⚠WARNING

Identifies an instruction which, if not followed, might cause serious personal injuries including possibility of death.

CAUTION

Denotes an instruction which, if not followed, may severely damage the unit and/or its components.

NOTE: Indicates supplementary information needed to fully complete an instruction.

We welcome any suggestions you may have concerning this manual and/or the unit, and we would appreciate hearing your comments on ways to better serve you. Please contact us by phone at one of the following numbers:

Exclusively for HR and HF Models:
Broan-NuTone Canada Inc.
1-866-737-7770

Exclusively for HRV and HEPA Models:
Venmar Ventilation inc.
1-800-567-3855

ABOUT THESE UNITS

⚠ WARNING

TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSON(S) OBSERVE THE FOLLOWING:

1. This unit is intended for residential installation only.
2. Use this unit only in the manner intended by the manufacturer. If you have questions, contact the manufacturer at the address or telephone number listed in the warranty.
3. Before replacing filters, servicing or cleaning unit, disconnect power cord from electrical outlet.
4. Installation must be done in accordance with all applicable codes and standards, including fire-rated construction codes and standards.
5. This unit is not designed to provide combustion and/or dilution air for fuel-burning appliances.
6. When cutting or drilling into wall or ceiling, do not damage electrical wiring and other hidden utilities.
7. Do not use this unit with any solid-state speed control device other than optional wall controls 40415 and 40425.
8. This unit must be grounded. The power supply cord has a 3-prong grounding plug for your personal safety. It must be plugged into a mating 3-prong grounding receptacle, grounded in accordance with the national electrical code and local codes and ordinances. Do not remove the ground prong. Do not use an extension cord.
9. Do not install in a cooking area or connect directly to any appliances.
10. Do not use to exhaust hazardous or explosive materials and vapors.

CAUTION

1. To avoid prematurate clogged filters, turn OFF the unit during construction or renovation.
2. Please read specification label on product for further information and requirements.
3. Be sure to duct air outside – Do not intake / exhaust air into spaces within walls or ceiling or into attics, crawl spaces, or garage.
4. Intended for residential installation only in accordance with the requirements of NFPA 90B.
5. Do not run any air ducts directly above or closer than 2 ft (0.61 m) to any furnace or its supply plenum, boiler, or other heat producing appliance. If a duct has to be connected to the furnace return plenum, it must be connected not closer than 9’ 10” (3 m) from this plenum connection to the furnace.
6. The ductwork is intended to be installed in compliance with all local and national codes that are applicable.

TABLE OF CONTENTS

1. Typical Installations 4-6
   - 1.1 HRV 2600, HR 2.6, HEPA 3100, HF 3.1 and HEPA 4100 Unit Installations 4
     - 1.1.1 Stand Alone 4
     - 1.1.2 Central Draw Point 4
     - 1.1.3 Return-to-Return Installation 5
   - 1.2 Installations for HEPA 4100 Only 5
     - 1.2.1 Geographical Location 5
     - 1.2.2 HEPA 4100 Attic Installation 6
2. Dimensions 7
   - 2.1 HRV 2600 and HR 2.6 Units 7
   - 2.2 HEPA 3100, HF 3.1 and HEPA 4100 units 7
   - 2.3 Mounting and Servicing Considerations 7
3. Before Starting 8
   - 3.1 Inspect the Content of the Box 8
   - 3.2 Tools, Materials and Installation Kits 8
   - 3.3 Locating the Unit 8
4 Wall Control Installation 9-10
5 Install the Unit 11-17
   - 5.1 Mount the Ports on the Unit 11
   - 5.2 How to Hang the Unit 11
   - 5.3 Planning of the Ductwork 12
   - 5.4 Installing Non-Insulated Ducts and Registers 12-14
     - 5.4.1 Stand Alone System 12-13
     - 5.4.2 Central Draw Point 13-14
     - 5.4.3 Return-to-Return 14
   - 5.5 Installing Insulated Flexible Ducts 15-16
     - 5.5.1 Connection to Tandem® Transition 15
     - 5.5.2 Connection to the 5" to 6" Oval Ports of the Unit 15-16
   - 5.6 Installing Dual Exterior Hood 16-17
     - 5.6.1 Assembling Dual Exterior Hood 16
     - 5.6.2 Locating the Dual Exterior Hood 16
     - 5.6.3 Connecting Tandem® Transition to the Dual Exterior Hood 16-17
   - 5.7 Connecting the Drain 17
6 Controls 18-19
   - 6.1 Main Switch 18
   - 6.2 40415 and 40425 Wall Controls Description 18
   - 6.3 Operating 40415 / 40425 Controls 18
   - 6.4 Wall Controls Configuration 19
7 Maintenance 20-21
   - 7.1 Biannual Maintenance 20-21
   - 7.2 Annual Maintenance 21
8 Parts Ordering Chart 22
9 Troubleshooting 22

1. TYPICAL INSTALLATIONS

Installations may vary according to the model number and the position in which the unit is installed. Use the following illustrations as guidelines to help you decide on how your unit will be installed.

All the units should be hung from the joists, and installed either vertically or horizontally.

NOTE: For more details, see Point 5.2 in Section 5 INSTALL THE UNIT.

In every case, bathroom fans and a range hood should be used to exhaust stale air. Also, for homes with more than one level, we recommend one exhaust register at the highest level.

There are 3 installation methods: Stand Alone, Central Draw Point and Return-to-Return Installation.

NOTE: An electrical outlet has to be available within 3 feet of the unit.

1.1 HRV 2600, HR 2.6, HEPA 3100, HF 3.1 and HEPA 4100 Unit Installations

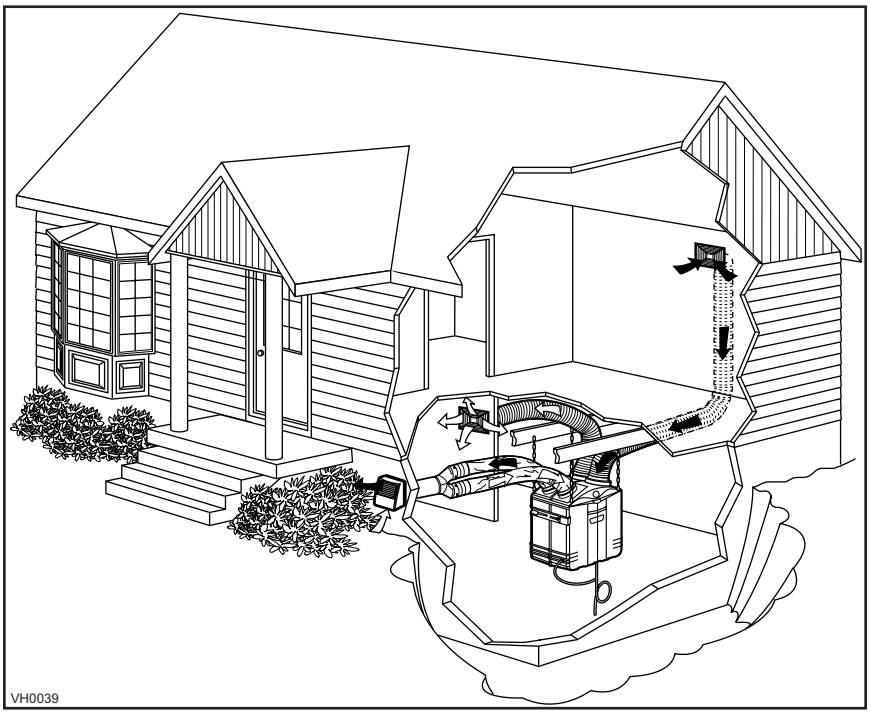
1.1.1 Stand Alone (Primarily for homes with radiant hot water or electric baseboard heating.)

HRV 2600 and HR 2.6 units only

Stale air coming from the register located at the highest level of the house is exhausted to the outside. Outside fresh air is filtered and supplied by the register located in the lowest liveable level. See figure at right.

HEPA 3100, HF 3.1 and HEPA 4100 units only

A portion of stale air coming from the register located at the highest level of the house is exhausted to the outside and the rest is drawn to the unit. Outside fresh air is blended with interior air and then filtered. Fresh filtered air is supplied by the register located in the lowest liveable level. See figure at right.


VH0039

1.1.2 Central Draw Point (Connection to a forced air system)

HRV 2600 and HR 2.6 units only

Stale air coming from the register located at the highest level of the house is exhausted to the outside. Outside fresh air is filtered and supplied to the return (plenum) of the forced air unit. See figure at right.

HEPA 3100, HF 3.1 and HEPA 4100 units only

A portion of stale air coming from the register located at the highest level of the house is exhausted to the outside and the rest is drawn to the unit. Outside fresh air is blended with interior air and then filtered. This filtered air is supplied to the return (plenum) of the forced air unit. See figure at right.

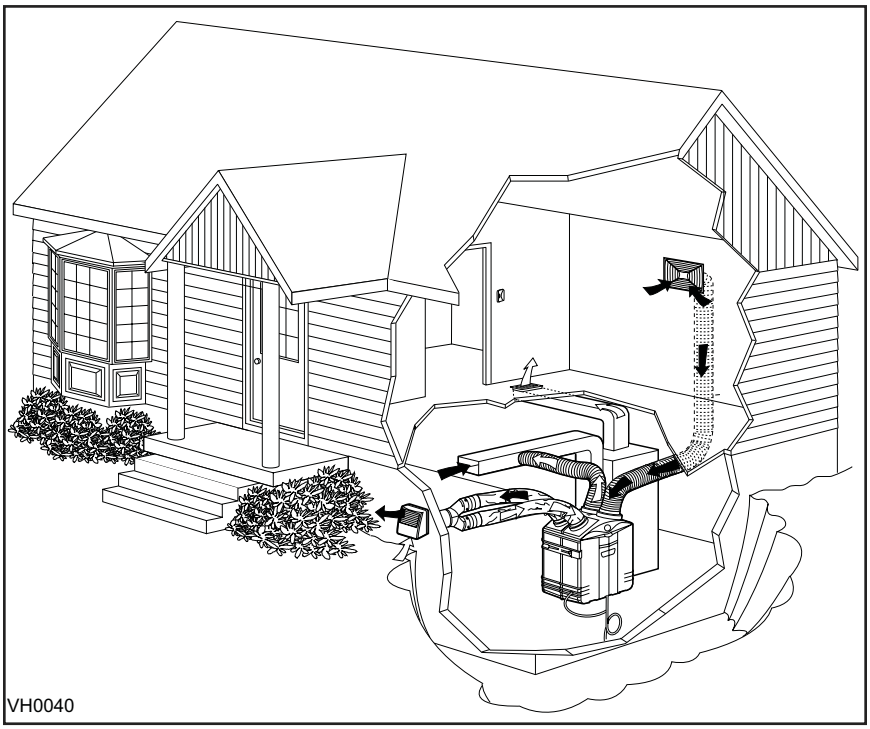
All units:

For this type of installation, it is not essential that the forced air system blower runs when the unit is in operation, but we recommend it.

NOTE: Home with multiple forced air systems should have 1 unit on each system.

CAUTION

Do not connect the unit (HRV 2600, HR 2.6, HEPA 3100, HF 3.1 or HEPA 4100) to any forced air system supply duct.


VH0040

1. TYPICAL INSTALLATIONS (CONT'D)

1.1 HRV 2600, HR 2.6, HEPA 3100, HF 3.1 AND HEPA 4100 UNIT INSTALLATIONS (CONT'D)

1.1.3 RETURN-TO-RETURN INSTALLATION (CONNECTION TO A FORCED AIR SYSTEM)

HRV 2600 AND HR 2.6 UNITS ONLY

Stale air is exhausted to the outside. Outside fresh air is filtered and supplied to the return (plenum) of the forced air unit. See figure at right.

HEPA 3100, HF 3.1 AND HEPA 4100 UNITS ONLY

A portion of stale air is exhausted to the outside and the rest is drawn to the unit. Outside fresh air is blended with interior air and then filtered. This filtered air is supplied to the return (plenum) of the forced air unit. See figure at right.

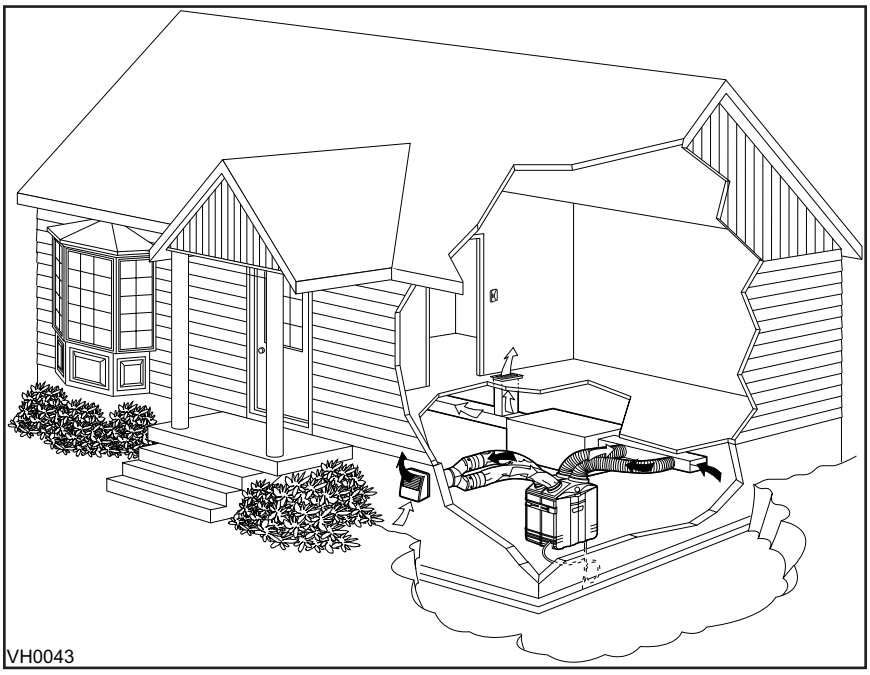
ALL UNITS:

To avoid cross-contamination and achieve the highest efficiencies, the forced air system blower must always be ON.

NOTE: Home with multiple forced air systems should have 1 unit on each system.

CAUTION

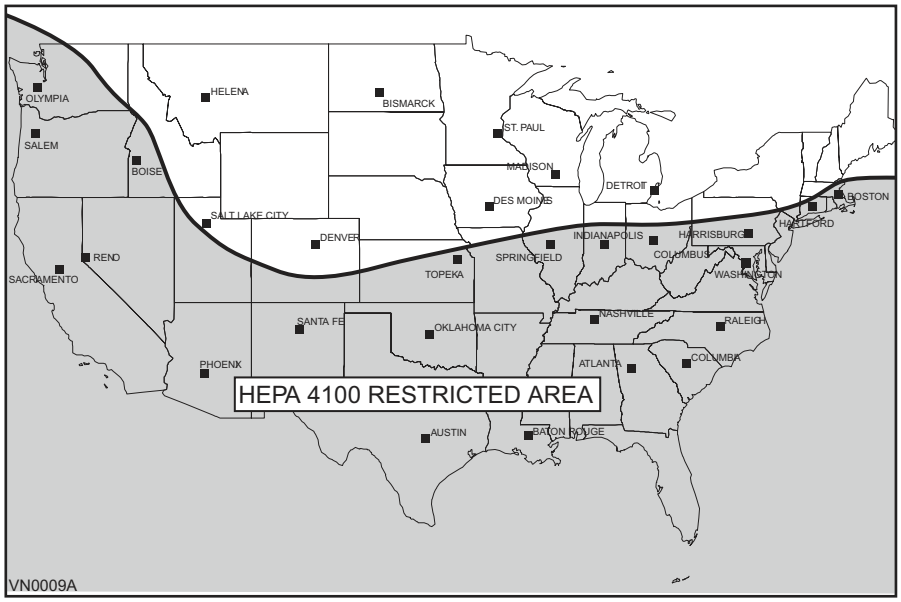
Do not connect the unit (HRV 2600, HR 2.6, HEPA 3100, HF 3.1 or HEPA 4100) to any forced air system supply duct.



1.2 INSTALLATION FOR HEPA 4100 ONLY

1.2.1 GEOGRAPHICAL LOCATION

The HEPA 4100 unit was created to meet specific requirements related to geographic locations. Take a look at the map below. This unit can be installed anywhere in the USA, but the ventilation will be reduced in cold weather. HEPA filtration is not affected however.



NOTE: The HEPA 4100 unit is designed to assist in the management of humidity introduced into the home. In extreme humidity conditions, the use of additional dehumidification may be required to quickly remove all excess moisture.

1. TYPICAL INSTALLATIONS (CONT'D)

1.2 INSTALLATION FOR HEPA 4100 ONLY (CONT'D)

1.2.2 HEPA 4100 ATTIC INSTALLATION

All 3 types of installations can be used in the attic (Stand Alone, Central Draw Point or Return-Return). The example shown below is a Return-Return installation (connection to a forced air system).

CAUTION

Due to the potential temperature difference between the attic and the rest of the house, all unit ducts must be insulated.

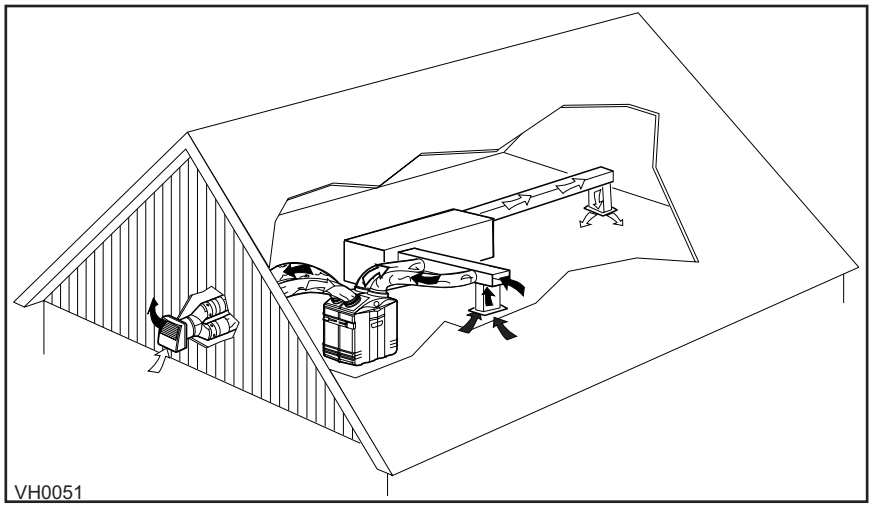
CAUTION

The attic temperature must always be above 0°C (32°F).

A portion of stale air is exhausted to the outside and the rest is drawn to the unit. Outside fresh air is blended with interior air and then filtered. This filtered air is supplied to the return (plenum) of the forced air unit.

To avoid cross-contamination and achieve the highest efficiencies, the forced air system blower must always be ON. See figure below.

NOTE: Home with multiple forced air systems should have 1 unit on each system.

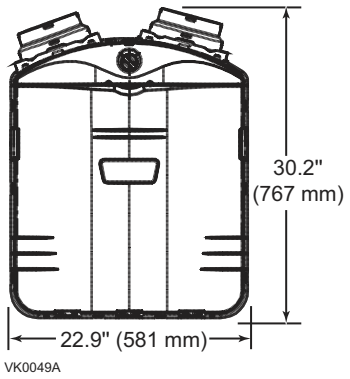


CAUTION

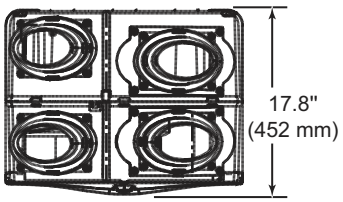
Do not connect the HEPA 4100 to any forced air system supply duct.

2. DIMENSIONS

2.1 HRV 2600 AND HR 2.6 UNITS

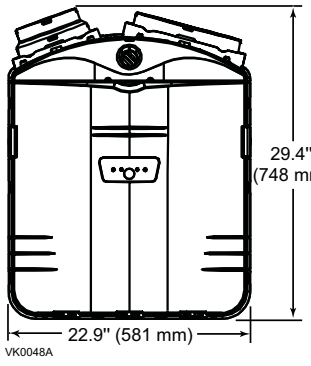


FRONT VIEW

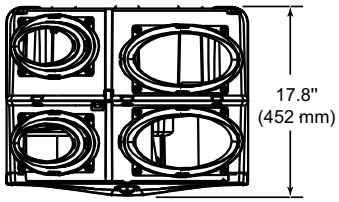


TOP VIEW

2.2 HEPA 3100, HF 3.1 AND HEPA 4100 UNITS



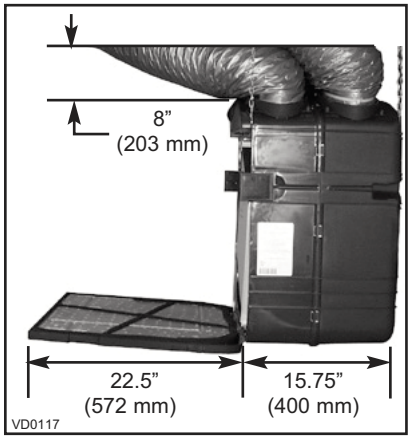
FRONT VIEW

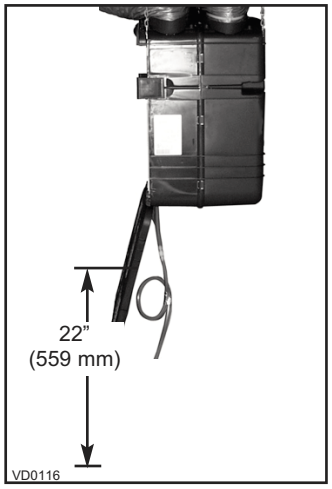


TOP VIEW

2.3 MOUNTING AND SERVICING CONSIDERATIONS

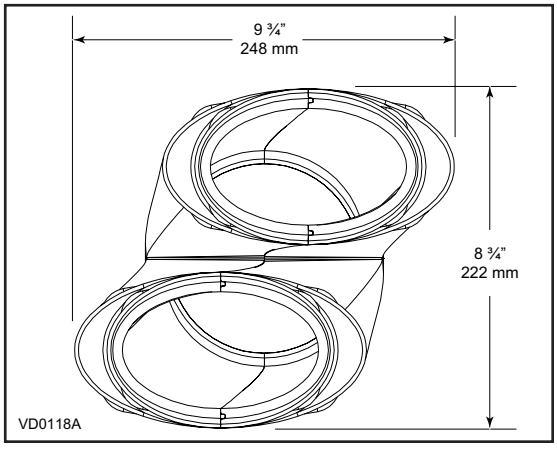
- The two following pictures are showing the minimum clearance needed to open the door completely.





NOTE: A minimum of 8" (203 mm) clearance from any obstruction on top of the unit is required for the ductwork radius turn.

- The joist opening needed to install the Tandem® tansition (included in both installation kits) must be 9 ¾" (248 mm) minimum. Also, the maximum height of the Tandem transition is 8 ¾" (222 mm). See Tandem transition end view beside.



3. BEFORE STARTING

3.1 Inspect the Contents of the Box

⚠ WARNING

To avoid risk of suffocation, discard the plastic bag wrapping the unit and the wall control.

- Inspect the exterior of the unit for shipping damage. Ensure that there is no damage to the door, door latches, main switch, etc.
- Inspect the interior of the unit for damage. Ensure that blower assembly, heat recovery core, insulation, dampers, MERV8 filter (HRV 2600 or HR 2.6 units only) prefilter and HEPA filter (HEPA 3100, HF 3.1 or HEPA 4100 units only), etc. are all intact.

3.2 Tools, Materials and Installation Kits

Here are the tools and materials needed to perform the installation:

- Phillips screwdriver #2 or Robertson #1
- Hammer and flat blade screwdriver (for plenum connection installation only, to make holes in existing metal duct)
- Scissors or utility knife (to cut duct tape)
- Duct tape
- Tin snips or metal shear (for plenum connection installation only, to cut ductwork)
- Aluminum duct tape (for plenum connection installation only)
- Jig saw
- Caulking gun and caulking

For HRV 2600 and HR 2.6 units, the installation kit is #15273.
For HEPA 3100, HF 3.1 and HEPA 4100 units, the installation kit is #13932.

3.3 Locating the Unit

Choose an appropriate location for the unit.

- Within an area of the house where the ambient temperature is between 10°C (50°F) and 65°C (149°F) (basement, furnace room, closet, etc.).
- So as to provide easy access to the interior of the unit, for filter maintenance.
- Close to an exterior wall, so as to limit the length of the insulated flexible duct to and from the unit.
- Away from hot chimneys and other fire hazards.
- Allow for a power source (standard 3-prong grounding outlet).
- Close to a drain. If no drain is close by, use a pail to collect run-off.
  (For HRV 2600, HV 2.6, HEPA 3100 and HF 3.1 units only.)

4. WALL CONTROL INSTALLATION

⚠ WARNING

Always disconnect the unit before making any connections. Failure in disconnecting power could result in electrical shock or damage of the wall control or electronic module inside the unit.

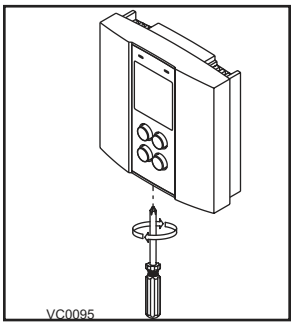
CAUTION

Failure to comply with the following can cause erratic operation of the unit:

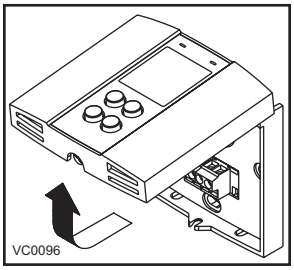
- **Never install more than one optional wall control per unit.**
- **Keep control low voltage wiring at least 1 foot (305 mm) away from motors, lightning ballast, light dimming circuit and power distribution panel. Do not route control wiring alongside electrical wires.**
- **Ensure the wires are securely connected.**
- **Disconnect power from the unit before removing the wall control faceplate from its mounting plate.**

1. Route the cable from the unit to a convenient location for the wall control.

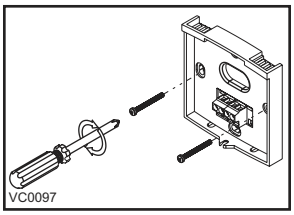
2. Loosen the locking screw (the screw cannot be completely removed).



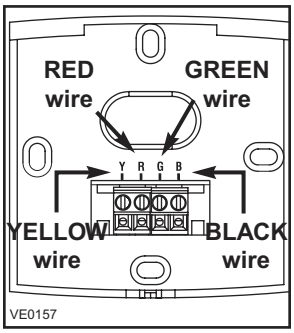
3. Detach the faceplate from the mounting plate by pulling the bottom part. If necessary, bore the mounting holes and insert anchors.



4. Pass the cable (4 wires) through the opening of the mounting plate and mount the plate to the wall using the provided screws.



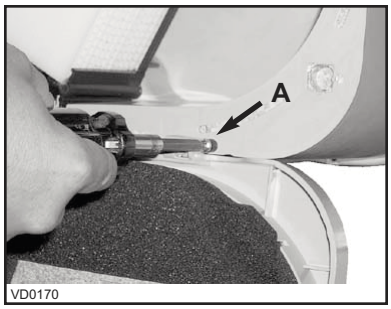
5. Splice back the end of the cable to access to the 4 wires. Strip the end of each wire. Connect each wire to its corresponding terminal: YELLOW wire to ''Y", RED wire to ''R", GREEN to ''G" and BLACK to ''B". See illustration beside.



6. Reinstall the front module onto the back plate and tighten the locking screw.

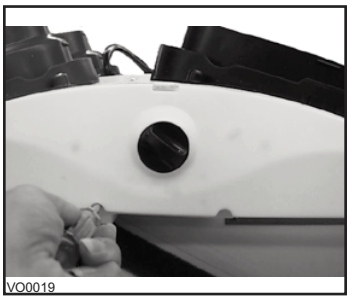
4. WALL CONTROL INSTALLATION (CONT'D)

7. Turn the unit switch knob to OFF position in order to unlock the door. Unlatch the door and open it. If required, the door can be removed. To do so, remove the stopper (**A**) located on the right side of the door hinge. Then, hold the door and hit with your palm its left side. Slide the door to the right to disengage it from the unit.



VD0170

8. Using a screwdriver, remove the 2 retaining screws of the front plate and carefully remove the front plate from the unit.

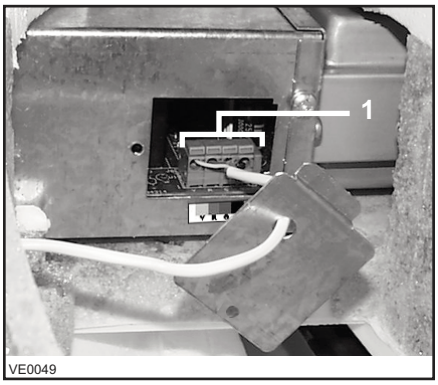

VO0019

9. Using a small rod, pierce a hole through the unit at the end of the wire channel in front of the unit. (See picture beside.) Splice back the end of the cable to access the 4 wires. Remove the insulated sleeve of each wire ends. Insert the end of the cable through the unit, using the small hole previously done. From the top right front hole of the unit, pull on the wire.

VD0088

10. In order to access the unit PCB terminals, remove the side door located on the electrical box and punch out its knock-out. Run the cable through the knock-out hole and connect each wire in their corresponding terminal (YELLOW in "Y", RED in "R", GREEN in "G"and BLACK in "B").

NOTE: Push forward slightly on the little tabs (**1**) to ease insertion of each wire. See picture beside.



VE0049

10. Reinstall the side door on the electrical box.

11. Route the wire through its channel. See picture beside.

VD0089

NOTES: 1. The wall control installation is now done. Do not reinstall the door and front plate of the unit at this time; they need to be removed for preparing the unit to be hung.

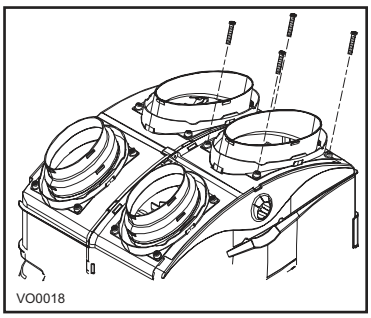
2. When using the wall control, the main switch on the unit must always be positioned to NORMAL/REMOTE.

5. INSTALL THE UNIT

5.1 Mount the Ports on the Unit

Mount the 8” oval ports and the 5” to 6” oval ports on the top of the unit using the screws provided in the hardware box (4 screws #8 x 3/4” long per port). See figure beside.

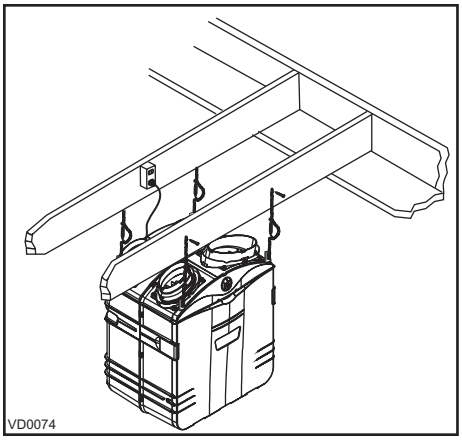
NOTE: All ports of the HRV 2600 and HR 2.6 are 5” to 6” oval.


VO0018

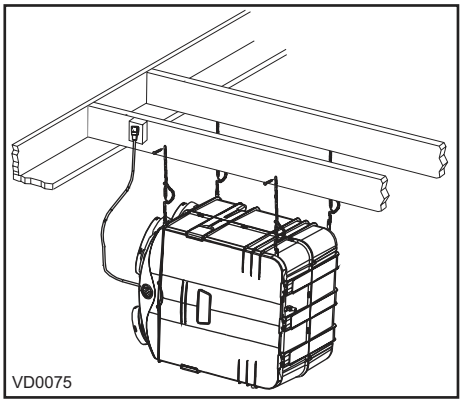
5.2 How to Hang the Unit

Use the 4 chains and springs in the hardware pack provided with the unit. According to your needs, you can install the unit either in vertical or horizontal position.

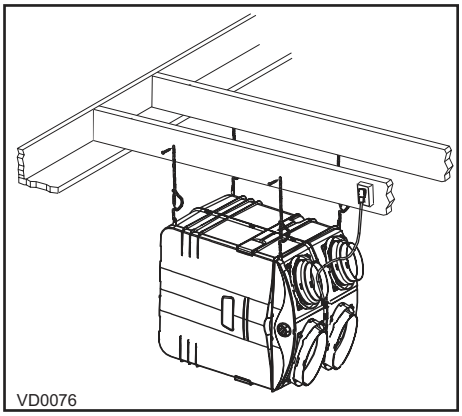
Vertical position - All models


VD0074

Horizontal position (left side)
All models except HR 2.6 and HRV 2600


VD0075

Horizontal position (right side)
HEPA 4100 only

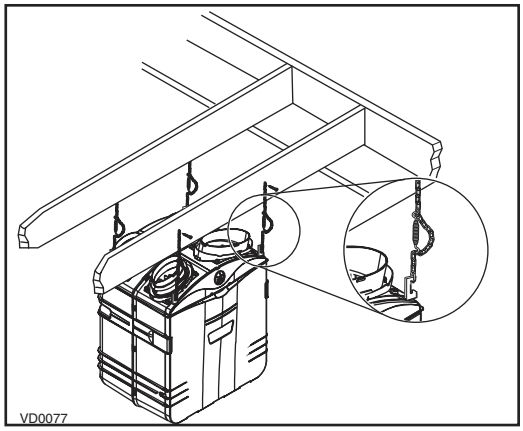

VD0076

VO0020

- Insert the 4 hooks in the square holes and assemble them to the unit using 4 screws #8 - 32 x 3/4”.

- Reinstall the front plate and the door; close the door.

- Hang the unit to the floor joist, using 4 #8 x 1½” screws, 4 chains and 4 springs. See illustration beside.


VD0077

CAUTION

The HRV 2600 and the HR 2.6 units must be level.

5. INSTALL THE UNIT (CONT'D)

5.3 Planning of the Ductwork

All units in this manual are prebalanced.

- Keep it simple. Plan for a minimum of bends and joints.
- Keep the length of outside insulated duct to a minimum.
- Do not ventilate crawl spaces or cold rooms. Do not attempt to recover the exhaust air from a dryer or a range hood. This would cause clogging of the filters and recovery module.
- If the house has two floors or more, be sure to plan for at least one exhaust register on the highest lived-in level.

5.4 Installing Non-Insulated Ducts and Registers

5.4.1 Stand Alone System (as illustrated in Section 1.1.1)

Stale air exhaust ductwork

⚠ WARNING

Never install a stale air exhaust register in a closed room where a combustion device operates, such as a gas furnace, a gas water heater or a fireplace.

- Install the stale air exhaust register in the main area where the contaminants are produced: kitchen, living room, etc. Position the register as far from the stairway as possible and in such a way that the air circulates in all the lived-in spaces in the house. If desired, you can install another register (sold separately).
- If the register is installed in the kitchen, it must be located at least 4 feet (1.2 m) from the range.
- Install the register 6 to 12 inches (152 to 305 mm) from the ceiling on an interior wall OR install it in the ceiling.

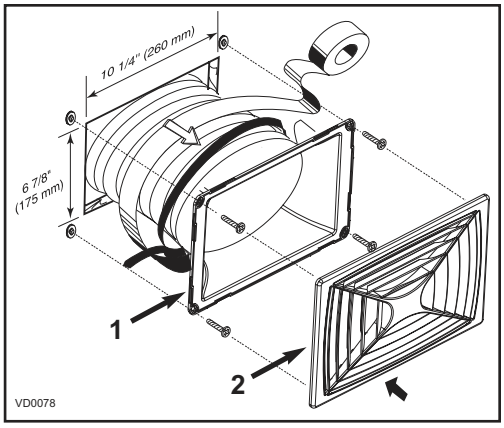
Fresh / Filtered air distribution ductwork

- Install the fresh / filtered air distribution register in a large, open area in the lowest level to ensure the greatest possible air circulation. Keep in mind that the filtered air register must be located as far as possible from the stale air register. If desired, you can install another register (sold separately).
- Install the register in the ceiling OR 6 to 12 inches (152 to 305 mm) from the ceiling on an interior wall. The duct lenght should be at least 15' (4.6 m). (The filtered air will then flow through the room and mix with room air, ensuring a continuous renewed airflow.)

HEPA 3100, HF 3.1 and HEPA 4100 units only

How to connect the 8" flexible duct to the registers

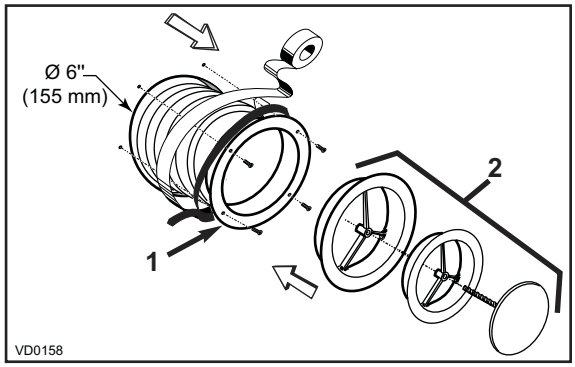
- Once the register location is determined, cut out a 10 ¼" x 6 7/8" (260 mm x 175 mm) hole. Run one end of the 8" flexible duct through the hole and fix it to the duct connector (**1**), using a tie wrap and duct tape. Fix the duct connector to the wall (or ceiling) using its 4 plastic anchors and 4 #8 x 3/4" screws. Then, snap on the register (**2**). See illustration beside.



HRV 2600 and HR 2.6 units only

How to connect the 6" flexible duct to the diffusers

- Once the diffuser location is determined, cut out 6" (155 mm) diameter hole. Run one end of the 6" flexible duct through the hole and fix it to the diffuser base (**1**), using a tie wrap and duct tape. Fix the diffuser base to the wall (or ceiling) using its 4 #8 x 3/4" screws. Then, slide in the diffuser (**2**). See illustration beside.



5. INSTALL THE UNIT (CONT'D)

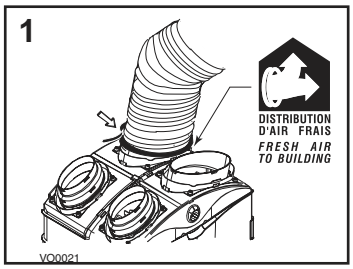
5.4 Installing Non-Insulated Ducts and Registers (cont'd)

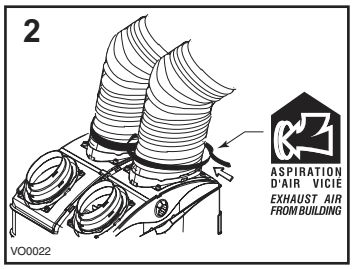
5.4.1 Stand Alone System (as illustrated in Section 1.1.1) (cont'd)

All units

How to connect the flexible duct to the unit ports

- Using the colored sticker dot included, identify which duct it is (red dot for stale airflow and blue dot for filtered airflow). Repeat the procedure for the other register (or diffuser). (No dots for HRV 2600 and HR 2.6 units.)
- Each port is identified on top of the unit (see illustrations below). Attach the fresh air to building duct (the one with the blue dot) to its corresponding port, using tie wrap (**1**). Then, attach the exhaust air from building duct (the one with the red dot) to the other port (**2**).





NOTE: Use an insulated duct (not included) if the duct will have to go through extreme temperature (eg: in northern area, not heated attic in winter or attic not cooled in southern area). Also, if you plan to stop the unit for more than 12 hours, we recommend to cover the duct with R12 insulation.

5.4.2 Central draw Point (as illustrated in Section 1.1.2)

Stale air ductwork

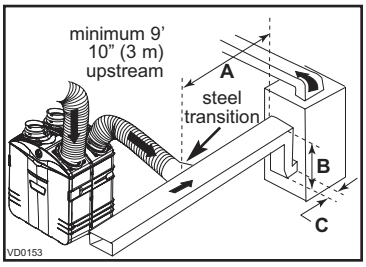
Same as for Stand Alone System, described in point 5.4.1.

Fresh/Filtered air ductwork (Return side connection)

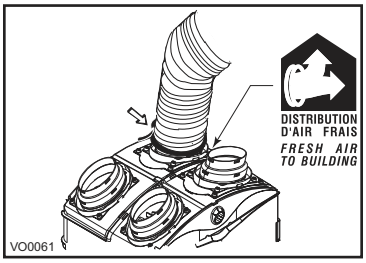
⚠ WARNING

When performing duct connections, always use approved tools and materials. Respect all corresponding laws and/or safety regulations. Please refer to your local building code.

HRV 2600 and HR 2.6 units only

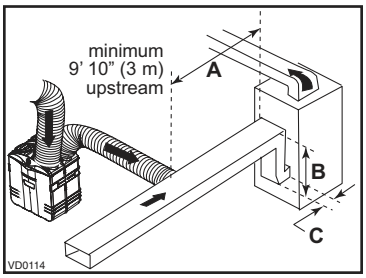


- Locate the opening for fresh/filtered air ductwork on the forced air unit at a minimum linear distance of 9' 10" (3 m) upstream (from forced air unit drop: **A**+**B**+**C**).

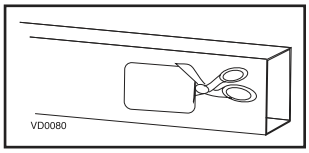


- Use a steel transition (not provided, available in hardware stores) to connect the unit duct to the forced air unit return duct. Attach the other end of the flexible duct to the ***FRESH AIR TO BUILDING*** port (see icon on the top of the unit). Use tie wrap and duct tape to seal the connection.

HEPA 3100, HF 3.1 and HEPA 4100 units only



- Trace a 10 ¼" x 6 7/8" (260 mm x 175 mm) opening on the forced air unit return duct at a minimum linear distance of 9' 10" (3 m) upstream (from forced air unit drop: **A**+**B**+**C**).



- Using a metal shear or a hammer and a flat blade screwdriver, punch a hole into the furnace/air handler return duct. Then, using metal shear, cut out the rectangular hole.

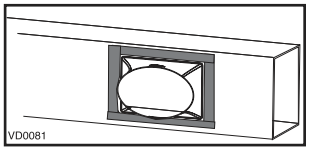
5. INSTALL THE UNIT (CONT'D)

5.4 Installing Non-Insulated Ducts and Registers (cont'd)

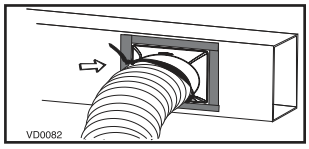
5.4.2 Central draw Point (as illustrated in Section 1.1.2) (cont'd)

Fresh/Filtered air ductwork (Return side connection) (cont'd)

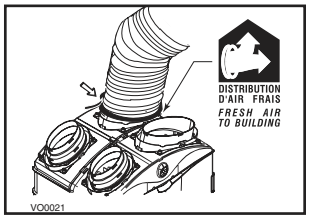
HEPA 3100, HF 3.1 and HEPA 4100 units only (cont'd)



- Fix the duct connector to the forced air unit duct using its 4 retaining screws (#8 x 3/4" long). Seal with duct tape.



- Take one end of the 8" flexible duct and slide it over the duct connector. Secure with a tie wrap. Carefully seal the connection with duct tape. Identifiy the duct using the blue sticker dot included.



- Attach this duct to the ***FRESH AIR TO BUILDING*** port (see icon on the top of the unit), using tie wrap and duct tape.

5.4.3 Return-to-Return (as illustrated in Sections 1.1.3 and 1.2.2)

Fresh/Filtered air ductwork (Return side connection)

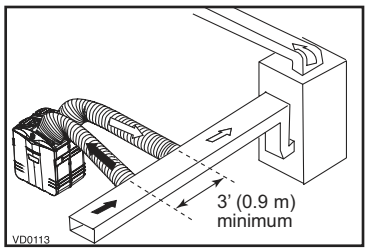
Same as for Central Draw Point, described in point 5.4.2.

Stale air ductwork (Return side connection)

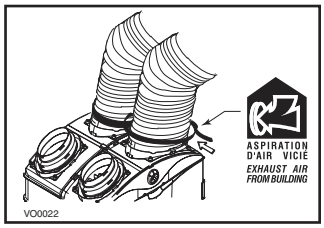
⚠ WARNING

When performing duct connections, always use approved tools and materials. Respect all corresponding laws and/or safety regulations. Please refer to your local building code.

All units



- Locate the stale air ductwork opening at least 3' (0.9 m) from the fresh/filtered air ductwork connection. For the HRV 2600 and HR 2.6 units, use a steel transition (not provided, available in hardware stores). Proceed as for the fresh/filtered air ductwork, but instead of using the blue dot sticker to identify the duct, use the red dot. (No dots for HRV 2600 and HR 2.6 units.)



- Attach this duct to the ***EXHAUST AIR FROM BUILDING*** port (see icon on the top of the unit), using tie wrap and duct tape.

5. INSTALL THE UNIT (CONT'D)

5.5 Installing Insulated Flexible Ducts

CAUTION

Make sure the vapor barrier on the insulated ducts does not tear during installation.

Use the following procedure for connecting the insulated flexible ducts to the Tandem® transition* (*EXHAUST AIR TO OUTSIDE* and *FRESH AIR FROM OUTSIDE*).

NOTE: If the joist are perpendicular to the ducts, or if the connection to the exterior hood is in a limited area, your installation will need two exterior hoods instead of one. In this case, do not use the Tandem® transition. Identify each insulated duct. For fresh air from outside duct, use the blue sticker dots (one dot at each end). For exhaust air to outside duct, use the red sticker dots (one dot at each end). (No dots for HRV 2600 and HR 2.6 units.) Then, go to point 5.5.2 and refer to the optional single hood enclosed instructions.

*Patent pending.

5.5.1 Connection to Tandem transition

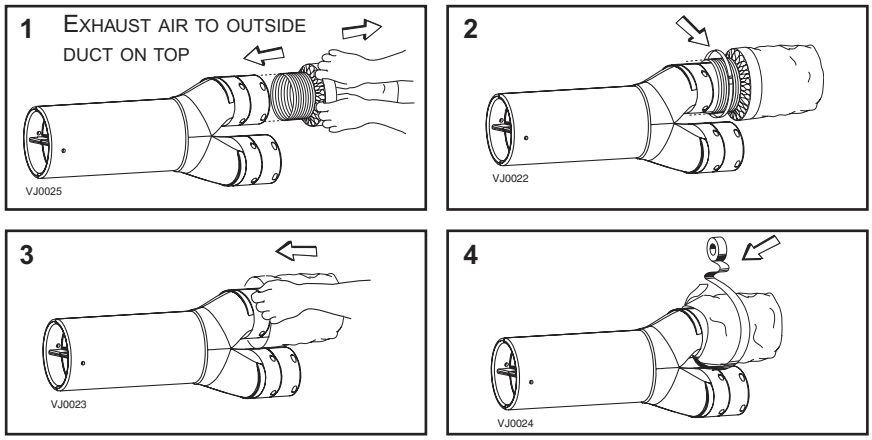
1. For each duct, pull back the insulation to expose the interior flexible duct.

2. Connect the interior flexible duct to the smaller part of the Tandem transition (5" oval) using a tie wrap.

NOTE: If you are using a 6" diameter insulated duct, use the bigger part of the Tandem transition (6" oval).

3. Pull the insulation over the joint. Pull the vapor barrier over the insulation.

4. Apply duct tape gently to the joint in order to make an airtight seal. See figures below.

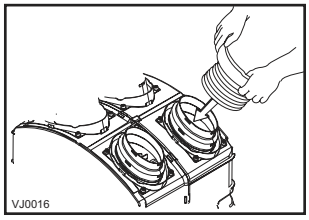


Identify each insulated duct. For fresh air from outside duct, use the blue sticker dots (one dot at each end). For exhaust air to outside duct, use the red sticker dots (one dot at each end). **Be careful to identify the exhaust air to outside duct (red dot) at the upper section of the transition.** (No dots for HRV 2600 and HR 2.6 units.)

5.5.2 Connection to the 5" to 6" oval ports of the unit

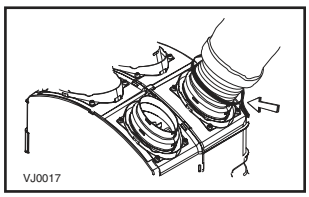
Use the following procedure for connecting the insulated flexible ducts to the 5" to 6" oval ports of the unit (*EXHAUST AIR TO OUTSIDE* and *FRESH AIR FROM OUTSIDE*).

1. Pull back the insulation to expose the flexible duct.

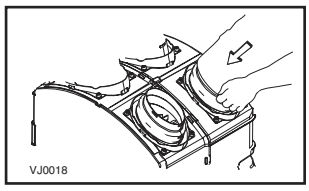


2. Connect the interior flexible duct to the smaller part of the port (5" oval) using a 24" tie wrap.

NOTE: If you are using a 6" diameter insulated duct, use the bigger part of the port (6" oval).



3. Pull the insulation over the joint and tuck it between the inner and outer rings of the port. Pull the vapor barrier over the insulation and over the outer ring of the port.



5. INSTALL THE UNIT (CONT'D)

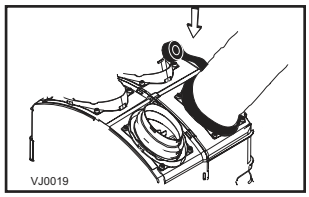
5.5 Installing Insulated Flexible Ducts (cont'd)

5.5.2 Connection to the 5" to 6" oval ports of the unit (cont'd)

CAUTION

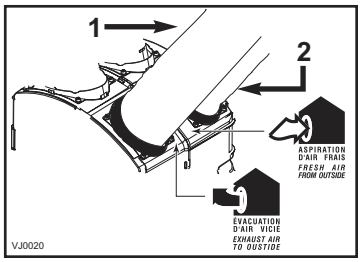
Avoid compressing the insulation when you pull the tape tightly around the joint. Compressed insulation loses its insulation properties and causes water dripping due to condensation on the exterior surface of the duct.

4. Apply duct tape gently to the joint in order to make an airtight seal.



5. Repeat steps 1 to 4 for the other 5" to 6" port.

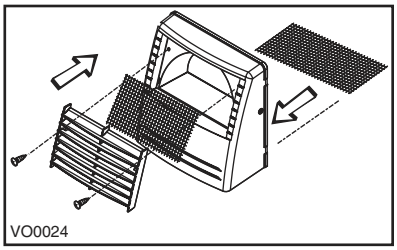
See figure beside to find the *EXHAUST AIR TO OUTSIDE* (**1**) and *FRESH AIR FROM OUTSIDE* (**2**) oval ports on the top of the unit. **Be careful to connect the right insulated duct to its corresponding port.**



5.6 Installing Dual Exterior Hood*

5.6.1 Assembling Dual Exterior Hood

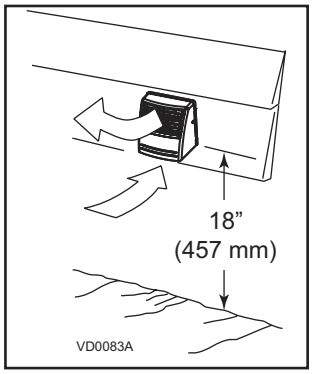
Exterior dual hood is coming in separate parts. Using 2 #8 x 3/4" screws, assemble the top metal screen and the plastic grille to the dual exterior hood. Then, slide the bottom metal screen to the dual exterior hood. See illustration beside.



*Patent pending

5.6.2 Locating the Dual Exterior Hood

The dual exterior hood must be installed at a minimum distance of 18 inches (457 mm) from the ground. See illustration beside.



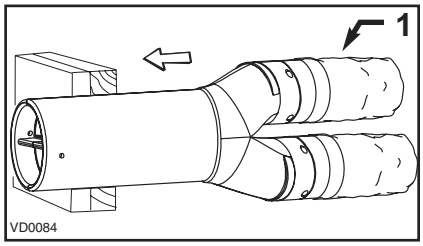
⚠ WARNING

Make sure this hood is at least 3 feet (0.9 m) away from any of the following:

- **High efficiency furnace vent.**
- **Any exhaust from a combustion source.**
- **Gas meter exhaust, gas barbecue-grill.**
- **Garbage bin and any other source of contamination.**

5.6.3 Connecting Tandem® transition to the Dual exterior Hood

1. Using a jig saw, cut a 6" diameter hole in the exterior wall and insert the Tandem transition through this hole.



1) EXHAUST AIR TO OUTSIDE duct

CAUTION

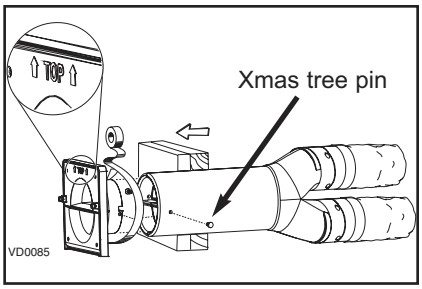
The Tandem transition must be inserted in such a way that the *EXHAUST AIR TO OUTSIDE* duct will be located on the top.

5. INSTALL THE UNIT (CONT'D)

5.6 Installing Dual Exterior Hood (cont'd)

5.6.3 Connecting Tandem® transition to exterior Dual Hood (cont'd)

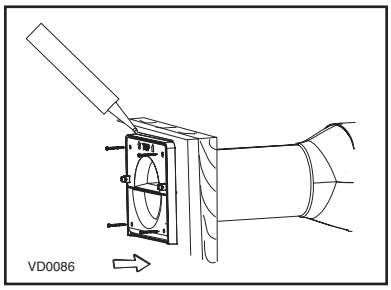
2. Join the end of the Tandem transition to the rear of the exterior backplate. Secure with 2 Xmas tree pins and seal properly with duct tape.



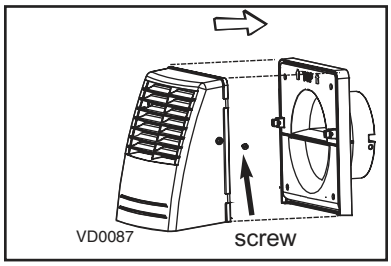
CAUTION

The exterior backplate must be installed with the word "TOP" pointing upward.

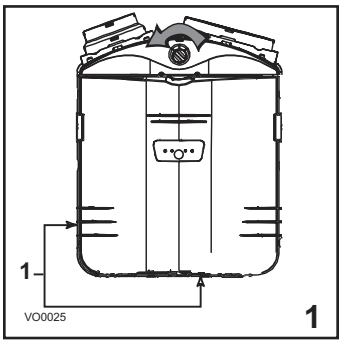
3. Lean the exterior backplate to the exterior wall. Using 4 #8 x 1 ½" screws, fix it to the wall. Seal the outline with caulking.



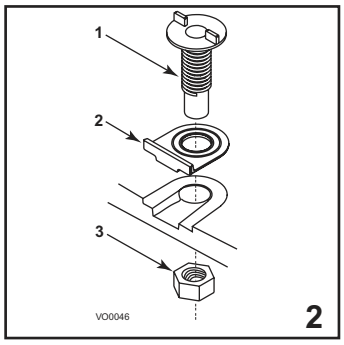
4. Snap the assembled exterior hood on its backplate and secure with 2 provided screws (#8 x 3/4" long).



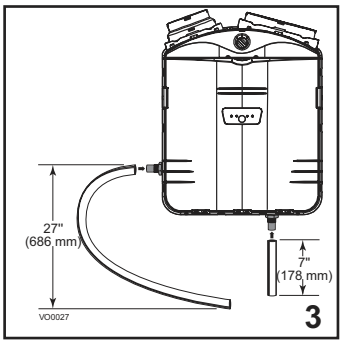
5.7 Connecting the Drain (HRV 2600, HR 2.6, HEPA 3100 and HF 3.1 units only)



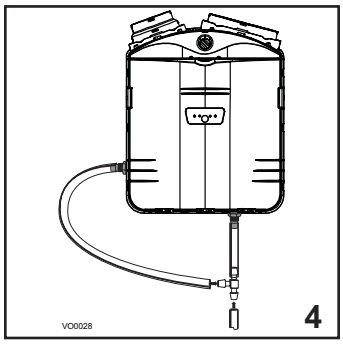
1. Remove the door by turning the switch knob to the OFF position (to unlock the door). Then, unlatch the door and open it. Slide out the core assembly to access the 2 drain fitting hole locations (**1**). Punch out the holes.



2. Hand tighten the 2 plastic drain fittings (**1**) using the gaskets (**2**) and nuts (**3**) as shown. Close the door.

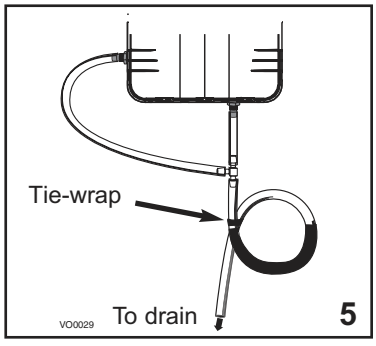


3. Cut 2 sections of plastic tubing; one 7" (178 mm) long and one 27" (686 mm) long, and attach them to each drain fitting as shown.



4. Join these 2 sections to the "T" junction and main tube as shown.

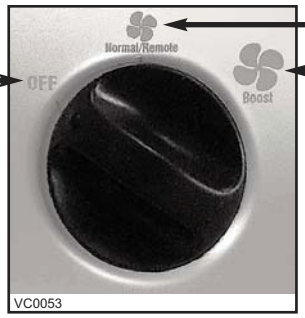
5. Make a water trap loop in the tube to prevent the unit from drawing unpleaseant odors from the drain source. Make sure this loop is situated BELOW the "T" as shown. This will prevent water from being drawn back up into the unit in case of negative pressure. Run the tube to the floor drain or an alternative drain pipe or pail. Be sure there is a slight slope for the run-off.



6. CONTROLS

6.1 Main Switch

All units are equipped with a 3-position main switch, located on the front panel.



OFF:
Unit is off and door is unlocked.

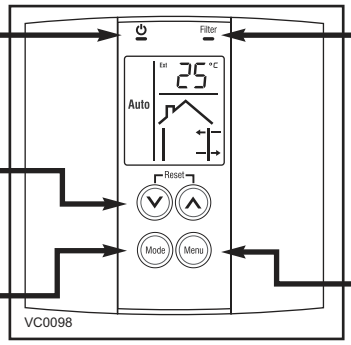
NORMAL/REMOTE:
Unit is operating on normal speed. This is the right position when a wall control is used.

BOOST:
Unit is operating on high speed.

6.2 40415 and 40425 Wall Controls Description

The included wall control is 40415 (intented for HRV 2600, HEPA 3100 and HEPA 4100 units only) or 40425 control (intented for HR 2.6 and HF 3.1 units only). The wall control is in OFF mode when power is applied for the first time. The mode does not change following a power failure.

40415 control or 40425 control



Illuminates in all modes except OFF mode.

- Press either button to change configuration setting (see section 6.4).
- Press both buttons to reset the filter counter or prefilter counter.

Press this button to switch mode (see Section 6.3).

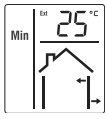
Filter and prefilter maintenance LED.
Flashes when it is time to replace prefilter and wash core filters.
See Biannual Maintenance in Section 7.1.
Lights up when it is time to replace filter and prefilter and wash core filters.
See Annual Maintenance Section 7.2.

Press this button to access configuration parameters (see section 6.4).

6.3 Operating 40415 / 40425 Controls

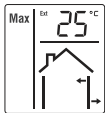
The wall controls 40415 and 40425 provide 5 operation modes. Press the **Mode** button to select the desired mode.

Normal Mode (Min)



The unit exchanges air at normal speed. The outdoor temperature* is displayed.

Boost Mode (Max)

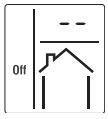


The unit exchanges air at high speed. The outdoor temperature* is displayed.

Recirculation Mode (Re-circ)

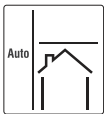
The unit recirculates air. However, every 20 minutes the unit exchanges air for 2.5 minutes so that it can obtain a reading of the outdoor temperature*.

Off Mode

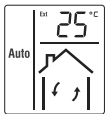


The unit is off. The outdoor temperature* is not displayed.

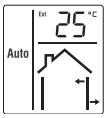
Automatic Mode (Auto)



Off in Auto mode



Air recirculation in Auto mode



Air exchange in Auto mode

The unit operates on a 60-minute cycle. For the first 40 minutes, the unit recirculates air or is off (See configuration parameter 2). For the last 20 minutes, it exchanges air. However, if the outdoor temperature* is too high or too low (see configuration parameters 3 and 4), the unit recirculates air during the last 20 minutes.

* The outdoor temperature reading is taken from the unit *FRESH AIR FROM OUTSIDE* port; due to the lenght of the insulated duct, the reading is slightly different from the real outside temperature.

6. CONTROLS (CONT'D)

6.4 Wall Controls Configuration

See the configuration table below for the list of configuration parameters.

Press the **Menu** button for 3 seconds to enter or exit the configuration menu.

NOTE: The wall control automatically saves any changes and exits the configuration menu if no button is pressed within the next 60 seconds.

Press the **Menu** button briefly to advance to the next parameter (menu number).

Press the ⌃ or ⌃ button to change the parameter setting.

Configuration table

Menu Number	Parameter	Options	Default Setting	Description
1	Temperature format	°C / °F	°C	Selects between °C and °F display.
2	Auto mode operation	RE / OF	RE	Selects between air recirculation (RE) and Off (OF) (see section 6.3).
3	Auto mode low temperature limit	-30°C to 0°C (-22°F to 32°F)	-25°C (-13°F)	Prevents air exchange in Auto mode if the outdoor temperature is too low (see section 6.3).
4	Auto mode high temperature limit	0°C to 30°C (32°F to 86°F)	27°C (81°F)	Prevents air exchange in Auto mode if the outdoor temperature is too high (see section 6.3).
5	Backlight mode	AU / ON	AU	AU: The screen illuminates for 12 seconds when any key is pressed ON: The screen is permanently illuminated.

7. MAINTENANCE

⚠ WARNING

Risk of electrical shocks. Before performing any maintenance or servicing, always disconnect the unit from its power source.

7.1 Biannual Maintenance (essential)

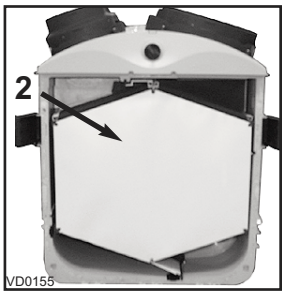
Perform this maintenance when the **Filter Maintenance LED is flashing**. Follow these steps:

1. Turn switch knob to OFF to unlock the door.

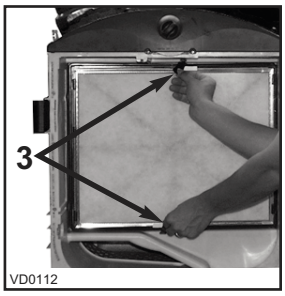
2. Unlatch the door and open it. Clean the inner side of the door with a clean damp cloth, them wipe with a dry one.

3. Slide out the heat recovery core (HRV 2600, HR 2.6, HEPA 3100 and HF 3.1 units only) or the energy recovery core (HEPA 4100 unit only) and the filter cartridge from the unit.
NOTE: To remove the filter cartridge, pull on its tabs (item **3**).

1) Heat Recovery Core

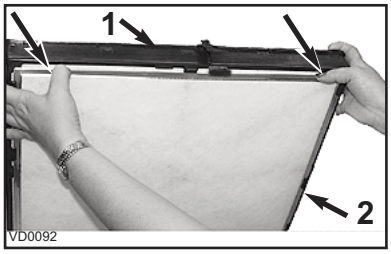


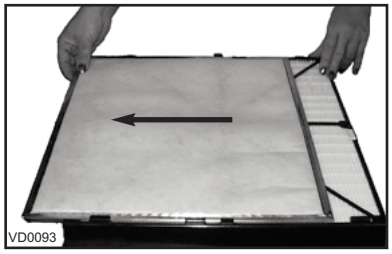
2) Energy recovery Core



3) Filter Cartridge Tabs

4. Using your thumbs, push on the prefilter side to disengage it from the filter cartridge. Then, slide it out of the filter cartridge and discard it. Install the new prefilter by reversing this operation.





1) Filter cartridge
2) Prefilter

NOTE: HRV 2600 and HR 2.6 units do not have prefilter. To clean the washable foam filter (MERV 8), vacuum to remove most of the dust. Let it soak in a solution of warm water and mild soap. Rinse thoroughly and let dry before reinstalling it.

5. Clean the inside walls of the unit with a clean damp cloth, them wipe with a dry one.

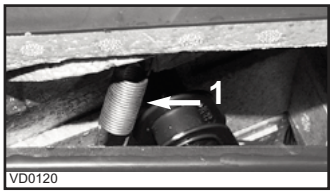
7. MAINTENANCE (CONT'D)

7.1 Biannual Maintenance (essential) (cont'd)

1) Core filters
2) Core

6. Wash the 2 core filters under hot water with mild soap. Rinse thoroughly and let dry completely before reinstalling on the core. Remove the dust on the core using a vacuum cleaner with a soft brush attachment.

NOTE: Make sure the damper spring (**1**) is still inside the left front port opening before reinstalling the heat or energy recovery core.



1) Damper spring

7. Close the door, close the latches and turn ON the switch knob to its previous position.

8. To reset the filter maintenance LED, simultaneously press both ⌃ and ⌃ buttons for 1 second.

7.2 Annual Maintenance (essential)

Perform this maintenance when the **Filter Maintenance LED stays ON**.

HRV 2600 and HR 2.6 units only

Do the same operations as the Biannual Maintenance (Section 7.1). Then, clean the exterior hood(s).

HEPA 3100, HF 3.1 and HEPA 4100 units only

Proceed as the Biannual Maintenance (Section 7.1), but instead of replacing the prefilter (point 4), discard the complete HEPA filter cartridge (including prefilter). Install a new HEPA filter cartridge (or a new pleated filter cartridge) with a new prefilter on it. To reset the filter maintenance LED, simultaneously press both ⌃ and ⌃ buttons for 5 seconds.

8. PARTS ORDERING CHART

#	Description	Part no.	HRV 2600	HR 2.6	HEPA 3100	HF 3.1	HEPA 4100
1	Prefilter Kit (2)	05123	-	-	1	1	1
2	HEPA Filter Kit	04803	1*	1*	1	1	1
3	Pleated MERV 12 Filter Kit*	04804	1*	1*	1*	1*	1*
4	Washable Foam Filter MERV 8	04852	1	1*	1*	1*	1*
5A	Core Filter Kit (2)	05120	1	1	1	1	-
5B	Core Filter Kit (2)	05689	-	-	-	-	1
6	Single Exterior Hood Kit**	13940	1	1	1	1	1
7A	Wall Control 40415	40415	1	-	1	-	1
7B	Wall Control 40425	40425	-	1	-	1	-

*The HEPA filter is factory installed in HEPA 3100, HF 3.1 and HEPA 4100 units. However, when it will be time to be replaced, a pleated filter or a foam filter can be purchased, but the filtration efficiency will not be the same as a HEPA filter.

** Item 6 is optional.

All listed parts are available where you have bought your unit.

NOTE: Please note that parts not listed are not available; those parts require assembly knowledge that only manufacturer can garantee.

9. TROUBLESHOOTING

PROBLEMS	SOLUTIONS
1. Unit does not start at Min. or Max. position.	• Check breaker or fuse in main distribution panel. • Check there is 120V at the electrical outlet. • Make sure the unit main switch is properly set in Normal or Boost position. • Disconnect control wire from the unit, then make sure the unit main switch is properly set in Normal or Boost position.
2. Unit does not run at Min. speed, but runs at Max.	• Disconnect control wire from the unit. Then, if the unit runs at Normal speed, check control wiring and wall control connections.
3. Unit is not operating as per the selected mode.	• Check if the unit main switch is in “Normal/Remote” position. • Check wall control wiring.
4. Wall control indicators do not work properly or not at all.	• Check wall control wiring.
5. Light indicators on wall control are flashing every second.	• Check if the unit main switch is in “Normal/Remote” position. • Check wall control wiring.
6. Wall control screen indicates E1.	• Check wall control wiring.
7. Wall control screen indicates E2.	• The temperature sensor is defective. (The unit will automatically switch to Off mode if this happens).

If the problem is still not solved, call your installer or the nearest authorized Service Center.
Also, you can reach the Customer Service Department at one of the following telephone numbers:

Exclusively for models HRV 2600, HEPA 3100 and HEPA 4100:
1-800-567-3855.

Exclusively for models HR 2.6 and HF 3.1:
1-866-737-7770.